Workgroup Servers
Section 3
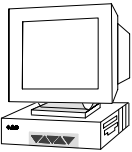
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Rev. 10/28/97

Ultra Enterprise 1 - Model 170

	Ultra Enterprise 1 Model 170
Packaging	Desktop
Performance SPECint95 SPECfp95 SPECbase_int95 SPECbase_fp95 AIM 3 LADDIS	Model 170 6.26 9.06 5.26 8.45 1305 1812
Performance Architecture Clock rate Cache on-chip Cache external No. of Processors	UltraSPARC-I 167MHz 16KB I-cache, 16KB D-cache 512KB 1
System Memory Standard Maximum Memory type Bandwidth Total memory slots SIMM size	64MB 1GB ECC 288 bits 8 16, 32, 64, 128MB (pairs)
Disk Storage SCSI bandwidth Standard Maximum internal Maximum external	10MB/sec. (8-bit fast) 2.1GB 8.4GB 147GB
I/O Architecture SBus slots Graphics (UPA Slots) Serial ports Parallel ports Audio Speaker	3 (32/64-bit, 25MHz) No 2 1 16-bit Internal
Network Ports AUI Ethernet Twisted-pair Ethernet ISDN BRI	Yes Yes (10 Mbps) Optional
Supported Graphics Options	TurboGX
Solaris License	Solaris 2.5.1 or later

Model 170: One 167 MHz UltraSPARC-I, 512KB E-cache

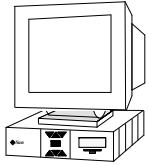| Part Number	Description	List Price	Discount Category
A11-UBA1-9S-064CE	Ultra Enterprise 1 Model 170 with 64MB, 2.1GB 5400 RPM internal fast SCSI-2 disk, 644MB internal SunCD 12, and Solaris server license.	$7,495	A
A11-UBA1-9S-128EE	Ultra Enterprise 1 Model 170 with 128MB, 2x2.1GB 5400 RPM internal fast SCSI-2 disk, 644MB internal SunCD 12, and Solaris server license.	$8,995	A
A11-UBA1-9S-256EE	Ultra Enterprise 1 Model 170 with 256MB, 2x2.1GB 5400 RPM internal fast SCSI-2 disk, 644MB internal SunCD 12, and Solaris server license.	$12,995	A

Ugrapdes:

From	Part Number and Description	List Price	Discount Category
Any SPARCserver	**UG-S-UBA-9S-064CE** Chassis upgrade to Ultra Enterprise 1 Model 170 with 64MB, 2.1GB internal fast SCSI-2 disk, and SunCD 12	$6,745	A*
Any SPARCserver	**UG-S-UBA-9S-128EE** Chassis upgrade to Ultra Enterprise 1 Model 170 with 64MB, 2x2.1GB internal fast SCSI-2 disk, and SunCD 12	$8,245	A*

NOTES: All Ultra 1 Model 170 configurations and upgrades require Solaris 2.5.1 or later Solaris 2.x release.

- All systems orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section in the End User Price Book.

- Order a Solaris Internet Access PlusPack at no charge with inital workstation order.

* Maximum discount may apply.

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Rev. 10/28/97

	Ultra Enterprise 2 Model 1200	Ultra Enterprise 2 Model 1300	Ultra Enterprise 2 Model 2170	Ultra Enterprise 2 Model 2200	Ultra Enterprise 2 Model 2300
Packaging	Desktop	Desktop	Desktop	Desktop	Desktop
Performance	Model 1200	Model 1300	Model 2170	Model 2200	Model 2300
SPECint95	7.72	12.10	6.39	7.72	12.30
SPECfp95	11.40	15.50	11.80	14.70	20.20
SPECbase_int95	6.90	10.40	N/A	6.90	10.50
SPECbase_fp95	11.10	14.50	10.70	13.30	17.70
AIM 3	N/A	N/A	N/A	N/A	N/A
LADDIS	2565	N/A	3536	4303	N/A
Performance					
Architecture	UltraSPARC-I	UltraSPARC-II	UltraSPARC-I	UltraSPARC-I	UltraSPARC-II
Clock rate	200MHz	300MHz	167MHz	200MHz	300MHz
Cache on-chip	16KB I-cache, 16KB D-cache	16KB I-cache, 16KB D-cache	16KB I-cache, 16KB D-cache	16KB I-cache, 16KB D-cache	16KB I-cache, 16KB D-cache
Cache external	1MB	2MB	512KB per CPU	1MB	1MB
No. of Processors	1	1	2	2	2
System Memory					
Standard	128MB	128MB	128MB	256MB	256MB
Maximum	2GB (w/ 128MB SIMMs)	2GB (w/ 128MB SIMMs)	2GB (w/ 128MB SIMMs)	2GB (w/ 128MB SIMMs)	2GB (w/ 128MB SIMMs)
Memory type	ECC	ECC	ECC	ECC	ECC
Bandwidth	288 bits	288 bits	288 bits	288 bits	288 bits
Tot SIMM memory slots	16	16	16	16	16
SIMM size	16, 32, 64, 128MB (must be in groups of 4)	16, 32, 64, 128MB (must be in groups of 4)	16, 32, 64, 128MB (must be in groups of 4)	16, 32, 64, 128MB (must be in groups of 4)	16, 32, 64, 128MB (must be in groups of 4)
Disk Storage					
SCSI bandwidth	20MB/sec. (16-bit fast/wide)	20MB/sec. (16-bit fast/wide)	20MB/sec. (16-bit fast/wide)	20MB/sec. (16-bit fast/wide)	20MB/sec. (16-bit fast/wide)
Standard	4.2GB	4.2GB	2.1GB	4.2GB	4.2GB
Maximum internal	8.4GB	8.4GB	8.4GB	8.4GB	8.4GB
Maximum external	273GB	273GB	273GB	273GB	273GB
I/O Architecture					
SBus slots	4 (32/64-bit, 25MHz)	4 (32/64-bit, 25MHz)	4 (32/64-bit, 25MHz)	4 (32/64-bit, 25MHz)	4 (32/64-bit, 25MHz)
Graphics (UPA Slots)	1 (83/100MHz)	1 (83/100MHz)	1 (83/100MHz)	1 (83/100MHz)	1 (83/100MHz)
Serial ports	2	2	2	2	2
Parallel ports	1	1	1	1	1
Audio	16-bit	16-bit	16-bit	16-bit	16-bit
Speaker	Internal	Internal	Internal	Internal	Internal
Network Ports					
AUI Ethernet	Yes (requires MII adapter)	Yes (requires MII adapter)	Yes (requires MII adapter)	Yes (requires MII adapter)	Yes (requires MII adapter)
Twisted-pair Ethernet	Yes (10/100 Mbps)	Yes (10/100 Mbps)	Yes (10/100 Mbps)	Yes (10/100 Mbps)	Yes (10/100 Mbps)
ISDN BRI	Optional	Optional	Optional	Optional	Optional
Supported Graphics Options	Creator, Creator3D	Creator, Creator3D	Creator, Creator3D	Creator, Creator3D	Creator, Creator3D
Solaris License	Solaris 2.5.1 or later	Solaris 2.5.1 or later	Solaris 2.5.1 or later	Solaris 2.5.1 or later	Solaris 2.5.1 or later

Ultra Enterprise 2 - Model 1200

NOTES:

- All Ultra Enterprise 2 systems require Solaris 2.5.1 or later Solaris 2.x release.

- The Ultra Enterprise 2 systems are equipped with FastEthernet (100BaseT)/10BaseT via twisted pair. If connecting to other media with an external transceiver, it will need to connect to the MII connector.

- The Ultra Enterprise 2 systems have a wide SCSI connector on the back panel (68-pin). If narrow SCSI devices are to be connected, a conversion cable (50-68 pin) is needed (X903A or X904A). See Accessories section.

- Order a Solaris Internet Access PlusPack (IAPP-2.0-P) at no charge with inital workstation order.

- All system orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section in the End User Price Book.

- Sun Ultra Enterprise 2 systems require 4 identical SIMMs in 4 memory banks.

- Type 4 keyboard is not supported.

- Order additional memory, internal or external storage options as separate line items.

* Maximum discount may apply.

Model 1200: One 200 MHz UltraSPARC-I, 1MB E-cache

Part Number	Description	List Price	Discount Category
A14-UCB1-9S-128CD	Ultra Enterprise 2 Model 1200 server with 128MB, 4GB SCSI-2 disk, 644MB SunCD 12, Fast Ethernet, and Solaris server license.	$18,295	A

Ugrades:

From	Part Number and Description	List Price	Discount Category
Any SPARCserver	**UG-S-14UCB19S128CD** Chassis upgrade to Ultra Enterprise 2 Model 1200 with 128MB, 4GB SCSI-2 disk, and SunCD 12.	$15,995	A*
SPARCserver 20	**US20UCB1-9S-000ND** Chassis upgrade to Ultra Enterprise 2 Model 1200 with SunCD 12, no memory, no disk.	$9,300	A*
SPARCstation 20ZX, Ultra 1 - 170E, Ultra Enterprise 1	**U12-UCB1-9N-000NN** Chassis upgrade to Ultra 2 Model 1200 or Ultra Enterprise 2 Model 1200, no memory, no disk.	$8,300	A*

Ultra Enterprise 2 - Model 1300

Model 1300: One 300 MHz UltraSPARC-II, 2MB E-cache

Part Number	Description	List Price	Discount Category
A14-UEC1-9S-128CD	Ultra Enterprise 2 Model 1300 server with 128MB, 4GB SCSI-2 disk, 644MB SunCD 12	$24,295	A

Ugrades:

From	Part Number and Description	List Price	Discount Category
Any SPARCserver	**UG-S-14UEC19S128CD** Chassis upgrade to Ultra Enterprise 2 Model 1300 with 128MB, 4.2GB SCSI-2 disk, and SunCD 12.	$21,795	A*
SPARCserver 20	**US20UEC1-9S-000ND** Chassis upgrade to Ultra Enterprise 2 Model 1300 with SunCD 12, no memory, no disk.	$15,300	A*

Ultra Enterprise 2 - Model 2170

NOTES:

- All Ultra Enterprise 2 systems require Solaris 2.5.1 or later Solaris 2.x release.

- The Ultra Enterprise 2 systems are equipped with FastEthernet (100BaseT)/10BaseT via twisted pair. If connecting to other media with an external transceiver, it will need to connect to the MII connector.

- The Ultra Enterprise 2 systems have a wide SCSI connector on the back panel (68-pin). If narrow SCSI devices are to be connected, a conversion cable (50-68 pin) is needed (X903A or X904A). See Accessories section.

- Order a Solaris Internet Access PlusPack (IAPP-2.0-P) at no charge with inital workstation order.

- All system orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section in the End User Price Book.

- Sun Ultra Enterprise 2 systems require 4 identical SIMMs in 4 memory banks.

- Type 4 keyboard is not supported.

- Order additional memory, internal or external storage options as separate line items.

* Maximum discount may apply.

Model 2170: Two 167 MHz UltraSPARC-I, 512KB E-cache per CPU

Part Number	Description	List Price	Discount Category
A14-UBA2-9S-128CE	Ultra Enterprise 2 Model 2170 server with 128MB, 2.1GB 7200 RPM internal fast/wide SCSI-2 disk, 644MB SunCD 12, Fast Ethernet, and Solaris server license.	$18,995	A

Upgrades:

From	Part Number and Description	List Price	Discount Category
Any SPARCserver	**U-S-UBA2-9S-128CE** Chassis upgrade to Ultra Enterprise 2 Model 2170 with 128MB, 2.1GB Internal Fast SCSI-2 disk, and SunCD 12.	$14,995	A*
SPARCserver 20	**US20UBA2-9S-000ND** Chassis upgrade to Ultra Enterprise 2 Model 2170 with SunCD 12, no memory, no disk.	$10,995	A*
SPARCstation 20ZX, Ultra 1 - 170E, Ultra Enterprise 1	**U12-UBA2-9N-000NN** Chassis upgrade to Ultra 2 Model 2170 or Ultra Enterprise 2 Model 2170, no memory, no disk.	$9,995	A*

Ultra Enterprise 2 - Model 2200

Model 2200: Two 200 MHz UltraSPARC-I, 1MB E-cache per CPU

Part Number	Description	List Price	Discount Category
A14-UCB2-9S-256CD	Ultra Enterprise 2 Model 2200 server with 256MB, 4.2GB SCSI-2 disk, 644MB SunCD 12, Fast Ethernet, and Solaris server license.	$25,795	A
A14-UCB2-9S-512CD	Ultra Enterprise 2 Model 2200 server with 512MB, 4.2GB SCSI-2 disk, 644MB SunCD 12, Fast Ethernet, and Solaris server license.	$33,795	A

Upgrades:

From	Part Number and Description	List Price	Discount Category
Any SPARCserver	**U-S-UCB2-9S-256CD** Chassis upgrade to Ultra Enterprise 2 Model 2200 with 256MB, 4.2GB SCSI-2 disk, and SunCD 12.	$19,945	A*
SPARCserver 20	**US20UCB2-9S-000ND** Chassis upgrade to Ultra Enterprise 2 Model 2200 with SunCD 12, no memory, no disk.	$16,800	A*
SPARCstation 20ZX, Ultra 1 - 170E, Ultra Enterprise 1	**U12-UCB2-9N-000NN** Chassis upgrade to Ultra 2 Model 2200 or Ultra Enterprise 2 Model 2200, no memory, no disk.	$15,800	A*

Ultra Enterprise 2 - Model 2300

NOTES:

- All Ultra Enterprise 2 systems require Solaris 2.5.1 or later Solaris 2.x release.

- The Ultra Enterprise 2 systems are equipped with FastEthernet (100BaseT)/10BaseT via twisted pair. If connecting to other media with an external transceiver, it will need to connect to the MII connector.

- The Ultra Enterprise 2 systems have a wide SCSI connector on the back panel (68-pin). If narrow SCSI devices are to be connected, a conversion cable (50-68 pin) is needed (X903A or X904A). See Accessories section.

- Order a Solaris Internet Access PlusPack (IAPP-2.0-P) at no charge with inital workstation order.

- All system orders that include a monitor must also include a Country Kit; refer to the "Country Kits" section in the End User Price Book.

- Sun Ultra Enterprise 2 systems require 4 identical SIMMs in 4 memory banks.

- Type 4 keyboard is not supported.

- Order additional memory, internal or external storage options as separate line items.

* Maximum discount may apply.

Model 2300: Two 300 MHz UltraSPARC-II, 2M E-cache per CPU
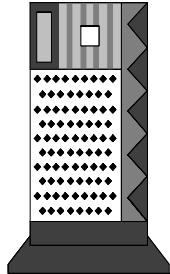
Part Number	Description	List Price	Discount Category
A14-UEC2-9S-256CD	Ultra Enterprise 2 Model 2300 server with 256MB, 4.2GB SCSI-2 disk, 644MB SunCD 12	$36,295	A
A14-UEC2-9S-512CD	Ultra Enterprise 2 Model 2300 server with 512MB, 4.2GB SCSI-2 disk, 644MB SunCD 12	$44,295	A

Upgrades:

From	Part Number and Description	List Price	Discount Category
Any SPARCserver	**U-S-UEC2-9S-256CD** Chassis upgrade to Ultra Enterprise 2 Model 2300 with 256MB, 4.2GB SCSI-2 disk, and SunCD 12.	$30,450	A*
SPARCserver 20	**US20UEC2-9S-000ND** Chassis upgrade to Ultra Enterprise 2 Model 2300 with SunCD 12, no memory, no disk.	$27,300	A*
SPARCstation 20ZX, Ultra 1 - 170E, Ultra Enterprise 1	**UA12-UEC2-9N-000NN** Chassis upgrade to Ultra 2 Model 2300 or Ultra Enterprise 2 Model 2300, no frame buffer, no memory, no disk	$26,300	A*

Ultra Enterprise 150 Server

Product Specifications	Ultra Enterprise 150
Packaging	Tower
CPU	UltraSPARC-I
Number of CPUs	1
Clock Speed	167 MHz
On-Chip Cache	32KB (16KB I-cache + 16KB D-cache)
External Cache	512KB
Main Memory	32MB - 1GB
Maximum Internal Disk	25.2GB Hot Plug
Maximum External Disk	324GB: Up to 4 SPARCstorage Array Model 112 or 1 SPARCstorage Array Model 210
I/O Slots	2 SBus
Ethernet	Fast Wide Ethernet, twisted pair standard (10- and 100-BaseT)
Solaris License	Solaris 2.5.1 or later
Performance	
SPECint95	6.34
SPECfp95	9.33
SPECrate_int95	57
SPECrate_fp95	84
AIM3	1,450
Laddis	2,102
Est. TPM	1,332

Ultra Enterprise 150 Server

This is a sample ordering guide for the Ultra Enterprise 150 server. Each step outlined by a large box in the guide represents a line item on a server sales order. A minimum legal configuration can be created by choosing steps 1 and 2 of the order process. Larger configurations can be created by choosing multiple options.

Step 1: *(Choose only one)*

> **TOWER OR RACK READY ENCLOSURE**
> *New Systems Only*

Part Number	Description	List Price	Discount Category
E150-UBA1-CD	Enterprise 150 Tower System with 167MHz UltraSPARC-I processor, 0MB main memory, 2.1GB system disk, 4.2GB storage disk, 3.5" floppy drive, SunCD 12, 10BASE-T/ 100BASE-T, fast/wide SCSI, Solaris server license (including Solstice AdminSuite, DiskSuite, and Backup for Single Server)	$7,995	A
E150-UBA1R-CD	Enterprise 150 Rack Ready System with 167MHz UltraSPARC-I processor, 0MB main memory, 2.1GB system disk, 4.2GB storage disk, 3.5" floppy drive, SunCD 12, 10BASE-T/ 100BASE-T, fast/wide SCSI, Solaris server license (including Solstice AdminSuite, DiskSuite, and Backup for Single Server)	$7,995	A

OR

> **CHASSIS UPGRADE FROM ANY SPARCserver**

From	To	List Price	Discount Price
any SPARCserver	**U-E150-UBA1-CD** Chassis upgrade to Sun Enterprise 150 Tower System with one 167MHz UltraSPARC-I processor, no memory, 2.1GB internal system drive, 2.1GB internal storage drive, SunCD12 internal CD-ROM, 1.44MB internal floppy drive.	$7,245	A
any SPARCserver	**U-E150-UBA1R-CD** Chassis upgrade to Sun Enterprise 150 Rack System with one 167MHz UltraSPARC-I processor, no memory, 2.1GB internal system drive, 2.1GB internal storage drive, SunCD12 internal CD-ROM, 1.44MB internal floppy drive.	$7,245	A

NOTE: Upgrades configurable with the following: 167MHz UltraSPARC-I processor, 0MB main memory, 4.2GB system drive, 2.1GB storage drive, Solaris Server License, internal 3.5" floppy drive, SunCD12, a SunSwift card providing fast/wide SCSI and 100BaseT Ethernet, 1 year hardware and 90 day software SunSpectrum warranty.

Step 2: *(Required)*

> **SYSTEM MEMORY**
>
> SIMMs can only be added in pairs up to a maximum of 4 pairs. Maximum configuration is 8 SIMMs (base system does not include memory).

SYSTEM MEMORY			
(X)7002A	64MB ECC memory expansion (2 x 32MB SIMMs)	$1,000	A*
(X)7003A	128MB ECC memory expansion (2 x 64MB SIMMs)	$2,000	A*
(X)7004A	256MB ECC memory expansion (2 x 128MB SIMMs)	$5,800	A*

Ultra Enterprise 150 Server (cont.)

Step 3: (Optional)

> **ADDITIONAL INTERNAL DISKS**
>
> Single disks can be added.
> Maximum 12 disks per configuration.
> (Base system includes 1 system disk and 1 data disk.)

Part Number	Description	List Price	Discount Category
ADDITIONAL INTERNAL DISKS			
(X)5214A	4.2GB Internal Hot Plug Disk Drive, 7200 RPM, fast/wide SCSI-2 disk drive	$1,300	A*

Step 4: (Optional)

> **INTERNAL STORAGE**
>
> One internal 4mm tape drive may be added.

INTERNAL STORAGE			
(X)6286A	12-24GB 4mm DDS-3 Internal Tape Drive	$1,800	A

* Maximum discount may apply
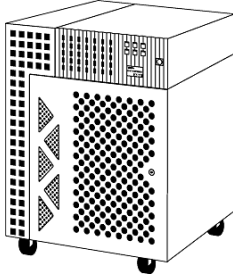
Step 5: (Optional)

> **NETWORK CARD**
>
> Up to 2 cards may be added.

NETWORK CARD			
(X)1042A	SBus Quad Ethernet card (QFE)	$1,995	A
(X)1025A	SunFDDI Single-Attach SBus Adapter 5.0 (SAS)	$2,500	A
(X)1059A	SunFastEthernet 10/100 SBus Adapter 2.0	$795	A

Ultra Enterprise 450 Server

Product Specifications	
Packaging	Tower
CPU	UltraSPARC-II
Number of CPUs	1-4
Clock Speed	250-300MHz
Cache per processor	Primary: 16KB I-cache, 16KB D-cache Secondary: 1-2MB external
System Memory	128MB-4GB
PCI	10 (three 32-bit, seven 64-bit slots)
SCSI	1, 3, or 5 40MB/sec UltraSCS-3 One 20MB/sec Fast/Wide SCSI-2 bus for CD-ROM & tape
Maximum Internal Disk	84GB: Up to 20 4.2GB, 7200RPM hot-swap UltraSCSI-3 drives
Maximum Disk Storage	6TB: Up to 20 50.4GB SPARCstorage MultiPack systems (1TB)
RAS Features	ECC protection for memory and datapaths, Automatic System Recovery (ASR), Redundant hot swap power supplies, hot swap disk drives, RAID 0, 1, 0+1, and 5, thermal sensing and auto fan control, overtemp protection, four levels of diagnostics, and high-availability cluster configuration options
Solaris License	Solaris 2.5.1 April 97, or Solaris 2.6
Performance SPECint_rate95 SPECfp_rate95 SPECrate_int95 SPECrate_fp95	 12.4 28.1 431 514

Ultra Enterprise 450 Server

This is a sample ordering guide for the Ultra Enterprise 450 server. Each step outlined by a large box in the guide represents a line item on a server sales order.

Step 1:

FAMILY PART NUMBER

➤

A25	Enterprise 450 Server

Step 2: (Choose only one)

BASE SYSTEM **All Enterprise 450 systems require Solaris 2.5.1 or later release.**

➤

Part Number	Description	List Price	Disc. Cat.
A25-UDB1-9S-128CD	E450 Server: tower, SunCD 12, power module, CPU/mem board, floppy, 250MHz/128MB UltraSPARC II, 4.2GB disk	$14,650	D
A25-UDB1-9S-256CD	E450 Server: tower, SunCD 12, power module, CPU/mem board, floppy, 250MHz/256MB UltraSPARC II, 4.2GB disk	$16,115	D
A25-UDB1-9S-512CD	E450 Server: tower, SunCD 12, power module, CPU/mem board, floppy, 250MHz/512MB UltraSPARC II, 4.2GB disk	$21,680	D
A25-UEC1-9S-128CD	E450 Server: tower, SunCD 12, power module, CPU/mem board, floppy, 300MHz/128MB UltraSPARC II, 4.2GB disk	$19,150	D
A25-UEC1-9S-256CD	E450 Server: tower, SunCD 12, power module, CPU/mem board, floppy, 300MHz/256MB UltraSPARC II, 4.2GB disk	$20,615	D
A25-UEC1-9S-512CD	E450 Server: tower, SunCD 12, power module, CPU/mem board, floppy, 300MHz/512MB UltraSPARC II, 4.2GB disk	$26,180	D

OR

CHASSIS UPGRADE FROM ANY SPARCserver

➤

UPGRADES			
UG14-5UNC-9S-000ND	Upgrade from any E2 Model 1300/2300 to E450 Server Chassis w/ 4 open module slots, SunCD 12, floppy, 2 DC/DC converters, 4 disk brackets, Solaris Server license	$7,025	D
UG14-5UDB19S-000ND	Upgrade from any UltraSPARC Server w/ 7200RPM, 1" high, 2.1/4.2GB disk to E450 Server Chassis w/ 250MHz/1MB CPU, SunCD 12, floppy, 4 disk brackets, Solaris Server license	$9,155	D
UG14-5UDB19S-000CD	Upgrade from any UltraSPARC/SPARCserver 20 w/ 4x32MB SIMMS to E450 Server Chassis w/ 250MHz/1MB CPU, 4.2GB disk, SunCD 12, floppy, Solaris Server license	$10,075	D
UG10-5UDB19S-128CD	Upgrade from any SPARCserver 10 or earlier server to E450 Server Chassis w/ 250MHz/1MB CPU, 128MB (4x32MB DIMMS), 4.2GB disk, SunCD 12, floppy, Solaris Server license	$11,350	D
UG10-5UDB19S-256CD	Upgrade from any SPARCserver 10 or earlier server to E450 Server Chassis w/ 250MHz/1MB CPU, 256MB (4x64MB DIMMS), 4.2GB disk, SunCD 12, floppy, Solaris Server license	$12,815	D
UG14-5UEC19S-000ND	Upgrade from any UltraSPARC Server w/ 7200RPM, 1" high, 2.1/4.2GB disk to E450 Server Chassis w/ 300MHz/2MB CPU, SunCD 12, floppy, 4 disk brackets, Solaris Server license	$12,550	D
UG14-5UEC19S-000CD	Upgrade from any UltraSPARC/SPARCserver 20 w/ 4x32MB SIMMS to E450 Server Chassis w/ 300MHz/2MB CPU, 4.2GB disk, SunCD 12, floppy, Solaris Server license	$13,215	D
UG10-5UEC19S-128CD	Upgrade from any SPARCserver 10 or earlier server to E450 Server Chassis w/ 300MHz/2MB CPU, 128MB (4x32MB DIMMS), 4.2GB disk, SunCD 12, floppy, Solaris Server license	$15,850	D
UG10-5UEC19S-256CD	Upgrade from any SPARCserver 10 or earlier server to E450 Server Chassis w/ 300MHz/2MB CPU, 256MB (4x64MB DIMMS), 4.2GB disk, SunCD 12, floppy, Solaris Server license	$17,315	D

Ultra Enterprise 450 Server (cont.)

Step 3: (Optional)

UltraSPARC CPU Modules

1 is included in Base Package. Up to 3 CPUs can be added if they are identical to one in the system.

With 4 CPUs, add 2nd power supply.

Part Number	Description	List Price	Disc. Cat.
(X)2230A	250MHz/1MB UltraSPARC-II CPU module w/ DC/DC converter	$5,500	A
(X)2240A	300MHz/2MB UltraSPARC-II CPU module w/ DC/DC converter	$10,000	A

Step 4: (Optional)

SYSTEM MEMORY

DIMMs can only be added in groups of 4, and they must match base system DIMMS. A maximum of 12 DIMMS may be added.

SYSTEM MEMORY			
(X)7002A	64MB ECC memory expansion (2 x 32MB SIMMs)	$1,000	A*
(X)7003A	128MB ECC memory expansion (2 x 64MB SIMMs)	$2,000	A*
(X)7004A	256MB ECC memory expansion (2 x 128MB SIMMs)	$5,800	A*

Step 5: (Required/Optional)

INTERNAL STORAGE EXPANSION

Maximum of 2 per system. 1 required to support 5-12 internal disks, 2 required to support 13-20 internal disks. Each (X)6600A uses one PCI slot (either 32 or 64-bit).

Requires a 2nd power supply.

INTERNAL STORAGE EXPANSION			
(X)6600A	8-bay internal storage expansion option; disk drives are not included	$1,495	A

Step 6: (Optional)

INTERNAL DISK DRIVES

1-2 8-bay options may be installed in each of 4 disk bays (max. 12 or 20 disks).

INTERNAL DISK DRIVES			
(X)5214A	4.2GB 7200RPM UltraSCSI disk drive	$1,300	A*

Step 7: (Optional)

INTERNAL TAPE DRIVES

Maximum 1 5.25" HH tape drive per system.

INTERNAL TAPE OPTIONS			
(X)6286A	12-24GB 4mm DDS-3 Internal Tape Drive for Enterprise 150.	$1,800	A
(X)6213A	14GB 8mm internal tape for Enterprise 3000&4000	$1,925	A
(X)6107A	SLR tape drive, 4-8GB capacity	$950	A

Ultra Enterprise 450 Server (cont.)

Step 8: (Optional)

PCI INTERFACES AND HOST ADAPTERS

Maximum of 10 per system. Each 6600A uses 1 PCI slot.
PCI cards must appear in the same Line Item as the base system.

Part Number	Description	List Price	Disc. Cat.
PCI INTERFACES AND HOST ADAPTERS			
(X)6540A	Dual SE UltraSCSI	$750	A
(X)6541A	Dual DIFF UltraSCSI	$1,440	A
X1032A	SunSwift (10/100BASE-T) FastEthernet w/ UltraSCSI PCI adapter	$995	A
(X)1033A	SunFastEthernet/P	$695	A
(X)1034A	Sun Quad FastEthernet/P	$1,795	A
(X)1035A	Sun FDDI/PCI, SAS adapter 1.0	$2,295	A
(X)1036A	Sun FDDI/PCI, DAS adapter 1.0	$3,395	A
(X)1039A	SunTRI/P	$1,195	A
(X)1040A	Sun High-Speed Serial Interface (HSI) PCI adapter 1.0	$1,995	A
(X)1041A	SunSAI/P	$995	A
(X)1044A	Sun GigabitEthernet/P	$2,095	A
(X)3660A	PGX PCI graphics card	$1,050	A

Step 9: (Optional/Required)

ADDITIONAL POWER SUPPLY
Maximum of 2 per system. 1 required with 4 CPUs or 5+
disks.

Part Number	Description	List Price	Disc. Cat.
PCI INTERFACES AND HOST ADAPTERS			
(X)9682A	560W Power supply	$1,495	A
300-1322	DC/DC Converter	$995	A

Step 10: (Required)

POWER CORD/COUNTRY KIT
Order 1 free of charge. Order a Power Cord Kit when the
server does not require a local graphics console. Order a Type
5 Country Kit when server includes a local graphics console.
Order a Power Cord Kit for each external peripheral if
required.

Part Number	Description	List Price	Disc. Cat.
POWER CORD/COUNTRY KIT			
X3500A	North American country kit	N/C	N/D
X3540A	North American UNIX	N/C	N/D
X3551A	UNIX Universal	N/C	N/D
X311L	Norht American/Asian localized power cord	N/C	N/D

Step 11: (Optional)

EXTERNAL DISK STORAGE

(Other options available - see Compatibility Matrix)

Part Number	Description	List Price	Disc. Cat.
EXTERNAL DISK STORAGE			
X5504A	18.2GB (2 x 9.1GB) 7200 RPM F/W SCSI SPARCstorage MultiPack	$5,640	A
X5505A	36.4GB (4 x 9.1GB) 7200 RPM F/W SCSI SPARCstorage MultiPack	$10,280	A
X5506A	54.6GB (6 x 9.1GB) 7200 RPM F/W SCSI SPARCstorage MultiPack	$14,920	A
X5514A	8.4GB (2 x 4.2GB) 7200 RPM SCSI-2 SPARCstorage MultiPack	$3,600	A*
X5515A	25.2GB (6 x 4.2GB) 7200 RPM SCSI-2 SPARCstorage MultiPack	$8,800	A*
X5516A	50.4GB (12 x 4.2GB) 7200 RPM SCSI-2 SPARCstorage MultiPack	$16,600	A*
X6507A	12.6GB (3 x 4.2GB) 7200 RPM F/W SCSI-2 SPARCstorage	$9,650	A
X6508A	29.4GB (7x4.2GB) 7200 RPM F/W SCSI-2 SPARCstorage	$15,850	A
X6514A	3x9.1GB SPARCstorage RSM	$12,410	A
X6515A	7x9.1GB SPARCstorage RSM	$22,290	A

Ultra Enterprise 450 Server (cont.)

Step 12: *(Optional)*

EXTERNAL TAPE STORAGE
(Other options available - see Compatibility Matrix)

Part Number	Description	List Price	Disc. Cat.
	EXTERNAL TAPE STORAGE		
X6280A	12-24GB 4mm DDS-3 Internal Tape UniPack with 68-68 pin SCSI cable.	$2,025	A
X6290A	72-144GB 4mm DDS-3 FlexiPack autoloader tape w/ 68-68pin SCSI cable	$4,550	A
X6230A	20-40GB 8mm SPARCstorage UniPack with 68-68 pin SCSI cable.	$5,625	A
X6227A	140GB 8mm SPARCstorage Library w/ 1 internal drive in a tower unit	$8,200	A
X6225A	400GB 8mm SPARCstorage Library w/ 1 internal drive	$23,500	A
X6057A	20-40GB DLT4000 FlexiPack tape w/ 68-68pin SCSI cable	$6,400	A*
X6060A	35-70GB DLT7000 FlexiPack tape w/ 68-68pin SCSI cable	$10,900	A*
X6071A	SPARCstorage DLT4700 tape autoloader in external desktop enclosure with both 50-50 and 50-68 pin SCSI cables.	$13,500	A
X6072A	1TB DLT 4/1000 External Library F/W.	$85,000	A
X6063A	DLT7000 drive option for the ETL 4/1800 and ETL 7/3500	$13,500	A

Step 13: *(Optional)*

OTHER OPTIONS

(Other options available - see Compatibility Matrix)

	OTHER OPTIONS		
X7103A	17" Entry level color monitor	$900	A
X267A	20" Color monitor	$2,100	A
X9690A	Rack-mounting Kit for UE450	$995	A
X956A	Enterprise expansion cabinet	$8,000	A
(X)3800A	Power Cord for Enterprise System and Expansion Cabinets, U.S. Version (NEMA L6-30P plug)	N/C	N/D
X3848A	Power Cord for Enterprise System and Expansion Cabinets, International Version (IEC 309 plug, 32A, 250V)	N/C	N/D
X9602A	Enterprise Cabinet Floor Brackets	$400	A
X981A	AUI Aapter Cable	$75	B
X985A	Serial Port "Y" Splitter Cable	$50	D
X976A	Centronics-compatible parallel port cable	$75	B
SOL-E450-D	E450 Solaris Media Kit supplement for 2.5.1 APR97	N/C	N/D